#### **Real-World Human Interface Requirement**

The GUI shall allow the user of the ATMS to intuitively select objects on the screen by pointand-click manipulation with the mouse. The system shall also provide "hot keys" for commonly used functions. The GUI shall incorporate:

- 1. pop-up multiple display objects and windows
- 2. menu "icons" and controls
- 3. dialog boxes
- 4. push button and other active commands
- 5. visual and audio alarms
- 6. use of object characteristics such as colors, highlighting, and flashing to alert users of status changes

## **Real-World Requirement**

Each notebook computer shall have the following characteristics:

- Intel Pentium 233 MHz
- 10.4 (diagonal) black matrix TFT color display with 65,536 colors visible at 800 x 600
- RAM upgradeable to 40 MB
- Customer removable hard drive
- 3 ½" 1.44 MB customer removable floppy diskette drive
- full-size keyboard with integrated mini joystick device
- long battery life
- carrying case for traffic signal technician environment

## **Real-World Interface Requirement**

Software shall permit the simultaneous use of at least three serial ports for communication with signs on a future dedicated cable network, with up to 16 signs assigned to a communication channel. Software shall be capable of accessing sign controller by user selectable software polling an/or controller initiated direct dialing.

### **Real-World Interface Requirement**

Routine polling by the central software shall generate a two-byte response from each sign controller. The response shall identify the user that initiated the current display, the problems detected, control status mode (local or remote), message number currently being displayed, and whether current message has been assigned priority status. Using different commands, the software can retrieve the text of messages stored in its memory, an error map of defective display elements, controller's clock time and date, the event schedule stored in controller's memory, and the controller's configuration parameters.

# **Real-World Functional Requirement**

All system functions executed by the system shall be recorded on the system log. The system log shall identify the source of the executed function as being from the scheduler or an interactive user, including identification of whether it represents a permanent or temporary function.